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GEOLOGICAL SURVEY OF LOUISIANA
BULLETIN No. 6

CARTOGRAPHY

OF

SOUTHWEST LOUISIANA

HARRIS

Baton Rouge

1907

BULLETIN No. 6 REPORT of 1907

GEOLOGICAL SURVEY OF LOUISIANA

G. D. HARRIS, Geologist-in-Charge

CARTOGRAPHY

OF

SOUTHWESTERN LOUISIANA

WITH SPECIAL REFERENCE TO THE

JENNINGS SHEET

BY

G. D. HARRIS

Made Under the Direction of the State Experiment Stations
W. R. DODSON, Director

BATON ROUGE
1907

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CARTOGRAPHY OF SOUTHWESTERN LOUISIANA

WITH SPECIAL REFERENCE TO THE

JENNINGS SHEET

By G. D. HARRIS

INTRODUCTION.

The area shown on the map which accompanies this Bulletin is but one of many in Southern Louisiana that deserve immediate attention from State and National surveys. The old Land Office maps, though showing accurately enough the metes and bounds of land grants and claims, give almost no idea of the surface features of the land, practically no roads, railroads, villages, towns nor houses as we find them today. As a matter of convenience to the people dwelling in these areas, for planning their roads, railroads and especially their canals and levees good topographic maps cannot be too quickly constructed. The great value of reliable determinations of the elevations of a great number of road-crossings, bridges and other points all over the area, and the value of the permanent iron bench-marks left every few miles along the railway track, must be apparent to all who are interested in canal work and rice culture. Again, the prospective immigrant must be greatly influenced by an authoritative map indicating just what he may expect to find in any particular region.

FORMER SURVEY WORK IN SOUTHWEST LOUISIANA.

Reference has already been made to the Land Office maps, made for the most part years ago, showing practically none of the roads, towns, etc., as we see them today, but showing generally the larger streams, sometimes with great detail, but indicating the lesser streams in a most crude manner. Several of the parishes have published local maps, usually the area within their own confines, basing the whole mainly on the old Land Office maps, but indicating the towns and the general direction of the roads as they were understood at the date of publication. The so-called

State maps published by geographic publishing companies as well as the maps of Louisiana found in atlases, are mainly from this same source and are of about the same order of merit as the parish maps just described.

In Bulletin No. 1 we have attempted to give an approximately correct idea of the topography of Southwestern Louisiana by means of contour lines. The data for the same were derived from railway, canal and lines of private sources.

In all such maps, however, the determinations of elevation as well as latitude and longitude must be considered as but approximately correct.

Cartographic work of a high order was begun in Southwestern Louisiana by the members of the Coast and Geodetic Survey in about 1866 and since that time such coastal areas as are indicated on the accompanying outline map (Pl. X) have been carefully mapped.

Up the Mississippi River and even the Red, triangulation and precise level work have been carried. But the great stretch of country to the south of Alexandria, until the coast is reached, is practically uncontrolled, either laterally or hypsometrically.

RECENT CO-OPERATIVE SURVEY WORK.

In starting cartographic work in this section of the State it was necessary to consider the most expedient methods of primary control. So far as hypsometry is concerned, the Survey had the foresight two years ago to establish, with the co-operation of the Coast and Geodetic Survey, a tide station where the height of the surafce of the gulf is continuously recorded. All this work is fully set forth in Bulletiu No. 3 of our report of 1905. On page 14 we read: "Our intention is, by a long series of tide-gauge readings, to determine the elevation of a few seacoast bench-marks with great accuracy, and from them run a line of precise levels along the Southern Pacific railroad and establish at intervals of every five miles permanent bench-marks and thereon give the true height of the same above sea-level. All local lines can then be referred to one datum plane and when local surveys extend for a few miles in an east-west direction both ends can be tied to reliable bench-marks and the accuracy of the local survey

can be tested without the expense of duplicating all the work. Fairly reliable local bench-marks many miles distant from the above-mentioned railroad will very soon be felt by local engineers and the mapping of the region topographically will be greatly facilitated. The time saved in running and re-running level lines will in a few years amount to tens of thousands of dollars."

CO-OPERATIVE WORK WITH THE U. S. GEOLOGICAL SURVEY.

The tide-gauge has already served one purpose for which it was established, the one indicated in the paragraph above—i. e., the furnishing mean sea-level for precise leveling in this part of the State. In the fall of 1906, the State Geological Survey co-operated with the United States Geological Survey and ran a series of levels from Weeks Island (tide gauge station) along the Southern Pacific spur to Baldwin, thence to Lafayette, thence to Jennings along the Southern Pacific Railroad, establishing and marking bench-marks along the right of way about every four miles. (See the accompanying outline map, Pl. X.)

So far as horizontal control is concerned, co-operating with the U. S. Geological Survey, the State Survey has been able to run a line of primary traverse from Morgan City, on the Atchafalaya, along the line of the Southern Pacific Railroad to Lafayette, thence to Jennings, back via Midland, Gueydan, Abbeville, New Iberia and Morgan City again. (See Pl. X.)

The results of the co-operative work with the United States are such that a large number of the 15° quadrangular maps in this part of the State are controlled in a primary manner. (See quadrangles in red, Pl. X.) These we propose to take up and complete as rapidly as funds will permit.

CO-OPERATIVE WORK IN PRECISE LEVELING.

(Notes furnished by the Computing Division, U. S. Geol. Survey.)

Crowley, Delcambre, Jeanerette, Jennings, Lafayette and New Iberia Quadrangles.

Acadia, Calcasieu, Iberia, Lafayette and St. Mary Parishes.

The following are the unadjusted results of a precise level line run in the fall of 1906, beginning at Weeks Island and following the line of the Cypremort Branch of the Southern Pacific Railroad to Baldwin, thence westward along the main line of the Southern Pacific Railroad to Jennings, a total disant of about one hundred miles. The work was done in co-operation with the Louisiana Geological Survey, Prof. G. D. Harris, Geogolist-in-charge, who established an automatic tide-gauge on Weeks Island in February, 1905. Records have been kept continuously since and will be continued for some years under the direction and at the expense of the United States Coast and Geodetic Survey. The line was started from a bench-mark established by Prof. G. D. Harris, and known as bench-mark No. 2, also upper bench-mark No. 1, and is the rounded top of a brass plug protruding through cap on iron post which is set about 250 yards west of the terminus of the railroad at the Weeks Island Salt Mine, and about 0.75 mile easterly from the tide-guage. The elevation as determined by the Coast Survey is 19.36 feet above the mean sea level.

Thirty-seven standard bench-marks were set at intervals of not more than 4 miles apart. The total divergence between direct and reverse lines was 0.061 foot.

The methods of leveling, type of level and limit of error are those now used by the Coast and Geodetic Survey except that the rods were graduated to yards and hundredths instead of in meters. They were non-extensible self-reading and 3.5 yards in length. The readings were taken to thousandths by estimating the smallest graduation, the sum of three readings giving the mean reading in feet.

The line was leveled independently in both forward and backward directions, broken by temporary bench-marks into sections 0.5 to 1.25 mile long and on all sections upon which the forward and backward measures differed more than 0.017 $\sqrt{D}$ (in which D is the distance between bench-marks in miles), forward and backward measures were repeated until a pair run in opposite directions checked within limits.

The party consisted of five men—two rodmen, an umbrella-man and one recorder under Mr. E. L. McNair, topographer, under the supervision of Mr. S. S. Gannett, geographer.

Standard bench-marks are stamped with the letters "LA" in addition to figures of elevation, mostly to nearest foot.

DELCAMBRE QUADRANGLE.

Weeks Island via Cyrpemort Branch Southern Pacific Railroad to Baldwin.

Weeks, shafthouse at Salt Mine, 150 yards west of; road to tide house, 20 feet to right of; iron post (Established by Prof. G. D. Harris of La. Geol. Survey)	19.360
Cypremort, 0.69 mile west of; road crossing; top of rail	3.2
Cypremort, in front of station; top of rail	7.8
Cypremort, 600 feet east of station of S. P. R. R., 22 feet north of main track, at cattle guard, iron post stamped "8"	7.662
Alice B station, at road crossing, top of rail	8.6
Alice B station; 0 :35 mile east of; road crossing, top of rail	8.7
Ivanhoe station, at road crossing, top of rail	7.5
Florence station, top of rail	7.6

JEANERETTE QUADRANGLE.

Cote Blanche station, in front of; top of rail	7.7
Cote Blanche station, 100 feet east of highway crossing, 20 feet north of center of track, iron post stamped "7"	7.195
Richland, top of rail	9.7
Glencoe, top of rail at station	11.3
Glencoe, southeast corner of station, 5 feet north of platform steps, 30 feet north of main track, iron post stamped "10"	9.531
Glencoe, 0.9 mile east of station, road crossing; top of rail	6.8
Glencoe, 1.60 miles east of; spur track to sugar mill, top of rail at switch stand	7.4
Glencoe station, 2.16 miles east of; road crossing, top of rail	5.7
Vacherie, 0.2 mile west of station, 240 feet west of highway crossing, 45 feet south of railroad and 15 feet southwest of corner of section tool house, iron post stamped "6 LA"	6.071
Vacherie, road crossing, top of rail	6.2
Vacherie, 0.3 mile east of; road crossing, top of rail	6.2
Franklin and Abbeville Junction, 20 feet west of end of station and 18 feet north of track (Weeks Island Branch), iron post stamped "5 LA"	5.043

Franklin and Abbeville Junction, top of rail	5.7
Franklin and Abbeville Junction, 1.20 miles east of; road crossing, top of rail	11.4
Baldwin, in front of station; top of rail	12.9
Baldwin, 100 feet northwest of station; 25 feet west of center of highway, 15 feet southof switch, iron post stamped "11 LA"	11.030

Baldwin via Southern Pacific Railway to Lafayette.

Baldwin, 1.0 mile west of; south of track, telegraph pole, spike in base of	6.02
Adeline, 1.4 miles east of; road crossing, top of rail	13.2
Adeline, 0.7 mile east of station; south of track and 150 feet west of mile-post 108, telegraph pole, spike in base of	10.16
Adeline, in front of station; top of rail	14.6
Adeline, 210 feet west of; south of track, telegraph pole, spike in base of	11.184
Adeline, 220 feet west of; about 30 feet north of track, iron post stamped "14 LA"	13.827
Adeline, 0.53 mile west of; south of track, telegraph pole, spike in base of	12.60
Adeline, 0.80 mile west of; road crossing, top of rail	16.8
Adeline, 1.40 miles west of station; road crossing, top of rail	18.3
Adeline, 1.46 miles west of; telegraph pole, south of track, spike in base of	16.32
Adeline, 2.44 miles west of; telegraph pole, south of track, spike in base of	12.77
Jeanerette, 2 miles east of; road crossing, top of rail	17.7
Jeanerette, 1.91 miles east of; telegraph pole, spike in base of	14.93
Jeanerette, 1.20 miles east of; road crossing, top of rail	19.7
Jeanerette, 0.82 mile east of; spike in base of telegraph pole, south of track, near eastern city limits	18.34
Jeanerette, 0.9 mile east of; road crossing on parish line (Iberia and St. Mary parishes), top of rail	19.8

Jeanerette, 0.8 mile east of; 30 feet east of highway, on St. Mary-Iberia parish line, 45 feet north of north track, iron post stamped "17 LA"	17.351
Road crossing, top of rail	19.4
Jeanerette, in front of station; south side of track, telegraph pole, spike in base of	17.71
Jeanerette, in front of station; top of rail	18.7
Jeanerette, 0.3 mile west of station; road crossing, top of rail	18.6
Jeanerette, 1.10 miles west of; road crossing, top of rail	19.3
Jeanerette, 1.25 miles west of; telegraph pole, spike in base of	17.08
Jeanerette, 1.1 miles west of; 57 feet south of railroad track, 45 feet west of center of highway, near fence, iron post stamped "17 LA"	16.785
Jeanerette, 2.30 miles west of; crossing of Narrow Gauge Plantation Railroad, top of rail	20.9
Jeanerette, 2.4 miles west of; spike in base of telegraph pole	16.96
Olivier, 3.2 miles east of; station; south of track, spike in base of telegraph pole	16.35
Olivier, 2.1 miles east of; south of track, spike in base of telegraph pole	17.15
Olivier, 1.1 miles east of; railroad drain; 8-penny nail in top of plank at south end of	18.04

DELCAMBRE QUADRANGLE,

Olivier, 0.2 mile east of station; crossing of Narrow Gauge Plantation Railroad, top of rail	21.8
Olivier, in front of; telegraph pole, spike in base of	20.06
Olivier, in front of station; top of rail	21.6
Olivier, 54 feet west of station; 25 feet north of north track, iron post stamped "Prim. Trav. Sta. No. 29," "21 feet LA" erroneously stamped	19.442
Olivier, 0.9 miles west of station; south of track, telegraph pole, spike in base of	18.37
Olivier, 1.70 miles west of; road crossing, top of rail	21.5
Olivier, 1.87 miles west of station; south of track, spike in base of telegraph pole	17.50

New Iberia, 2.75 miles east of; 225 feet west of highway crossing, 57 feet south of south track, iron post stamped "17 LA"	16.939
New Iberia, 1.5 miles east of; city limits, road crossing, top of rail	21.0
New Iberia, 1.5 miles east of; south of track, 450 feet east of mile-post 124, spike in base of telegraph pole	18.97
New Iberia, 1 mile east of; road crossing, top of rail	21.0

NEW IBERIA QUADRANGLE.

New Iberia, 1 mile east of; road crossing, top of rail	20.5
New Iberia, 0.5 mile east of; spike in base of telegraph pole north of railroad at junction Weeks and East Washington streets	18.35
New Iberia, U. S. Post Office Building, in face of foundation at right of main entrance, aluminum tablet stamped "23 LA"	23.236
New Iberia, water plug just east of station; top of bolt in northeast corner of base, painted white	21.12
New Iberia, in front of station; top of rail	20.0
New Iberia, water tank opposite station; 55 feet east of and 100 feet south of track; iron post stamped "27 LA ?"	19.059
(Notes say this is stamped "27," but it is probably incorrect.)	
New Iberia, 0.9 mile west of station; south of railroad, spike in base of telegraph pole	22.73
New Iberia, 1.70 miles east of; road crossing top of rail	23.4
Segura, 0.8 mile east of; south of track, at base of telegraph pole, nail in peg	21.10
Segura station, 0.10 mile east of; road crossing, top of rail	27.9
Segura, in front of station; top of rail	28.5
Segura, 0.13 mile west of; north of track, spike in base of telegraph pole	26.78
Segura, 600 feet west of station; in southwest corner of yard, 70 feet north of S. P. R. R., iron post stamped "28 LA"	28.362
Segura station, 0.26 mile west of; road crossing, top of rail	30.60
Segura, 1.2 miles west of station; south of track, spike in base of telegraph pole	26.89
Segura, 1.9 miles west of; road crossing, cattle guard No.	

131 A-B, top of rail	31.90
Burke, 0.06 mile east of station; spike in base of telegraph pole	29.54
Burke, 28 feet north of track; 20 feet east of public highway, iron post stamped "27 LA" (erroneously stamped)	27.999
Burke, in front of station; top of rail	30.20
Burke, 0.89 mile west of; spike in base of telegraph pole	25.71
Burke, 1.59 miles west of; road crossing, top of rail	27.8
Cade, spike in base of telegraph pole	29.92
Cade station, in front of; top of rail	30.7
Duchamp station, 165 feet east of; north of track, spike in base of telegraph pole	33.47
Duchamp, 20 feet east of highway; 25 feet north of track, iron post stamped "Prim. Trav. Sta. No. 32," "33 LA"	33.167
Duchamp, in front of station; top of rail	35.7
Duchamp, 0.5 mile west of; road crossing at cattle guards 135 D-E	36.0
Duchamp, 1.33 miles west of; south of track, spike in base of telegraph pole	28.68
Duchamp, 1.5 miles west of; road crossing at St. Martin-Lafayette parish line	34.6
Billeaud Sugar Mill, 0.71 mile east of; spike in base of "block signal line pole"	33.35
Billeaud Sugar Mill, top of rail at road crossing and station	34.1
Billeaud Sugar Mill, about 500 feet west of; spike in west tie under switch stand, 1.5 feet south of switch lock, near cattle guard, 138-A	34.71
Billeaud Sugar Mill, 500 feet west of; 30 feet north of track, iron post stamped "35"	35.325
Billeaud Sugar Mill, 0.90 mile west of; road crossing at cattle guard 138-D	35.6
Billeaud Sugar Mill, 1 mile west of; road crossing, top of rail	36.7
Broussard, station, telegraph pole, spike in base of	37.63
Broussard, 30 feet east of station; 25 feet south of track in corner of yard, iron post stamped "37 LA"	36.878

Broussard, in front of station; top of rail	37.2
Broussard, 1 mile west of; south of track, spike in base of telegraph pole	34.62
Broussard, 1.72 miles west of; 450 feet west of mile-post 140, spike in base of telegraph pole	30.79
Landry station, top of rail	34.0
Landry P. O., 0.61 mile west of; signal tower No. 1424; battery box, top of clasp on east end of east box	36.99
Landry, 0.61 mile west of; road crossing	37.2
Landry station, 0.61 mile west of; 18 feet north of track, public highway, 20 feet west of; iron post stamped "36 LA"	36.645

LAFAYETTE QUADRANGLE.

Lafayette, 2.23 miles east of; bridge No. 143 A, 450 feet west of; telegraph pole, spike in base of, south of track	38.53
Lafayette, 1.73 miles west of; road crossing, at cattle guard 143 C-D	30.7
Lafayette, 1.18 miles east of; 265 feet east of road crossing, spike in base of telegraph pole	30.79
Lafayette, 1.18 miles east of; public highway, 20 feet east of; 30 feet south of track, iron post stamped "36 LA"	35.797
Lafayette, 1.18 miles east of; road crossing, at Lafayette Sugar Mill	35.4
Lafayette, 0.80 mile east of; road crossing	38.3
Lafayette, 0.60 mile east of; road crossing	37.4
Lafayette, in front of station; top of rail	39.4
Lafayette freight house yard, southeast corner of, on Lincoln avenue, iron post stamped "Prim. Trav. Sta. No. 34," "39 LA"	39.114

Lafayette via Southern Pacific Railway to Jennings.

Lafayette, 0.30 mile west of; road crossing	39.3
Lafayette, 0.9 mile west of; road crossing at cattle guards 146 B-C	41.7
Lafayette, 1.5 miles west of; road crossing at cattle guards 147 A-B	40.8

Lafayette, 1.61 miles west of; telegraph pole south of track, spike in base of	37.02
Lafayette, 1.60 miles west of; cattle guard 147 B, 125 feet west, 48 feet north of track, in angle of road, iron post stamped "37 LA"	37.333
Lafayette, 2.4 miles west of; road crossing at cattle guards 148 A-B	41.4
Lafayette, 2.62 miles west of; signal tower No. 1485, 230 feet east of; telegraph pole, spike in base of	39.07
Scott station, 2.80 miles east of; road crossing at cattle guards 148 D-E	40.0
Scott, 1.86 miles east of; south of track, spike in base of telegraph pole	35.21
Scott station, 0.9 mile east of; road crossing at cattle guards 150 A-B	37.0
Scott station, 0.58 mile east of; signal tower No. 1505, 340 feet east of; south of track, spike in base of telegraph pole	34.03
Scott station, section yard northwest of; in southeast corner of; iron post stamped "36 LA"	36.410
Scott, in front of station; top of rail	36.2
Scott, 1.1 miles west of; railroad track at mile-post 151; spike in base of east post	36.35
Scott station, 2.1 miles west of; mile-post 152, spike in base of	32.16
Duson, 2.11 miles east of; mile-post 153, 200 feet west of; south of track, spike in base of telegraph pole	33.22
Duson, 2 miles east of; road crossing at cattle guards 154 B-C	37.1
Duson, 1 mile east of; 12.5 feet south of track, opposite mile to sta. post, iron post stamped "33 LA"	32.872
Duson, in front of station; top of rail	37.1
Duson, northwest corner of station, 25 feet west of; 50 feet north of track, iron post stamped "No. 36—35 feet—LA"	35.217
Duson, 1 mile west of; mile-post 156, 720 feet west of; spike in base of telegraph pole	30.410
Duson, 1.6 miles west of; road on parish line, top of rail	35.0
Duson, 1.6 miles west of; 20 feet west of public highway,	

15 feet south of track, iron post stamped "32 LA"	32.179
Rayne, 2.48 miles east of station; spike in base of telegraph pole	29.78
Rayne, 1.06 miles east of; south of track, spike in base of telegraph pole	31.58

CROWLEY QUADRANGLE.

Rayne, 0.40 mile east of; at crossing of O. G. & N. R. R., top of rail	35.8
Rayne, in front of station; top of rail	35.6
Rayne, section yard northwest of, southeast corner of; iron post stamped "No. 37, 32 LA"	31.673
Rayne, 1.45 miles west of; south of track and near signal tower, spike in base of telegraph pole	27.65
Rayne, 2.63 miles west of; mile-post No. 163, 480 feet east of; south of track, spike in base of telegraph pole	25.36
Rayne, 3.10 miles west of; road crossing at cattle guards 164 A-B	28.4
Rayne, 3.7 miles west of station; road crossing	27.3
Rayne, 3.71 miles west of; public highway crossing, 12 feet east of; 12 feet south of track, 90 feet west of mile-post 164, iron post stamped "25 LA"	25.189
Crowley, 2.5 miles east of; spike in base of milepost 165	23.23
Crowley, 1.3 miles east of; spike in base of mile-post 166	21.70
Crowley, 0.8 miles east of; crossing of Avenue J with S. P. R. R., top of rail	24.10
Crowley, in front of station; top of rail	23.8
Crowley, crossing of Parkinson avenue, 40 feet west of; 24.5 feet south of track, iron post stamped "No. 38, 24 LA"	23.760
Crowley, 1.16 miles west of; mile to station post (near mile-post 168), spike in base of	21.29
Crowley, 1.2 miles west of; road crossing, top of rail	23.0
Crowley, 2.2 miles west of; north right of way line of track (opposite mile-post 169), iron post stamped "19 LA"	18.610
Crowley, 3.41 miles west of; highway crossing, 100 feet west of; spike in base of telegraph pole	18.46
Crowley, 3.41 miles west of; highway crossing, top of rail	20.7

Crowley, 4.17 miles west of; mile-post 171, spike in base of	15.18
Estherwood, 1.15 miles east of; road crossing	19.4
Estherwood, 0.85 mile east of; mile-post 172, spike in base of	16.39
Estherwood, in front of station, 33 feet north of track, iron post stamped "17 LA"	16.484
Estherwood, in front of station; top of rail	19.4
Estherwood, 0.45 mile west of; road crossing	20.0
Estherwood, 1.6 miles west of; spike in base of telegraph pole	17.0
Midland, railroad crossing, telegraph pole in southwest angle, spike in base of	15.25
Midland station, railroad crossing, top of rail	19.3
Midland, 400 feet east of station; main line S. P. R. R., 35 feet south of; iron post stamped "14 LA"	14.351

JENNINGS QUADRANGLE.

Midland, 1.2 miles west of; signal tower No. 1762; 400 feet east of, telegraph pole south of track, spike in base of	15.52
Midland, 1.5 miles west of; top of rail at road crossing	19.2
Midland, 2.5 miles west of; road crossing at cattle guards 178 B-C	16.9
Mermentau, 2.4 miles east of; spike in base of telegraph pole	15.27
Mermentau, 1.7 miles east of; road crossing, top of rail	18.0
Mermentau, 1.3 miles east of; mile-post 179, 135 feet east of; 60 feet north of track, iron post stamped "10 LA"	10.397
Mermentau, 0.6 mile east of; road crossing, at cattle guards, 180 B-C	16.3
Mermentau, top of rail at station	16.8
Mermentau, 190 feet west of; 35 feet south of south rail, iron post stamped "No. 41, 13 LA"	12.773
Mermentau, 0.5 mile west of; signal tower No. 1808; 250 feet west of; spike in base of telegraph pole	13.39
Mermentau, 0.7 mile west of; road crossing at Silverwood Grocery store	17.2
Mermentau, 1.7 miles west of; mile-post 182, 175 feet east of; spike in base of telegraph pole	11.88

Mermentau, 2.8 miles west of; 400 feet east of road crossing; south of track, spike in base of telegraph pole	17.70
Jennings, 2.25 miles east of; public highway crossing, 25 feet east of, 65 feet north of track, iron post stamped "18 LA"	18.284
Jennings, 2.25 miles east of; road crossing	21.1
Jennings, 1.1 miles east of station; 180 feet east of station mile-post, spike in base of telegraph pole	19.48
Jennings, in front of station; top of rail	30.1
Jennings (old station), 300 feet west of; 55 feet south of track, 14 feet west of sidewalk, iron post stamped "No. 42, 29 ft. LA"	29.010
Jennings, 0.40 mile west of; signal tower No. 1818, 115 feet west of; 25 feet north of track, iron post stamped "25 LA"	25.385

CO-OPERATIVE WORK IN PRIMARY TRAVERSE.

(Notes furnished by the Computing Division U. S. Geol. Survey.)

Abbeville, Calumet, Crowley Delcambre, Jeanerette, Lafayette, Jennings and New Iberia Quadrangles.

Acadia, Iberia, Lafayette, St. Martin, St. Mary and Vermilion Parishes.

The following geographic positions were determined by primary traverse by Mr. L. E. Tucker, topographic aid, in the fall of 1906. The line begins with the position of the Pilgrim Baptist church at Morgan City, as given by the U. S. Coast and Geodetic Survey, and follows the Southern Pacific Railroad to New Iberia, thence checking back along the same route, at Morgan City. From New Iberia the line continues along the Southern Pacific Railroad via Lafayette and Crowley to Midland. From Midland the line follows the Louisiana & Western, Iberia and Vermilion branch of the Southern Pacific Railroad south and east via Gueydan and Abbeville, checking at New Iberia. A line was also run along the Southern Pacific Railroad from Midland to Jennings, checking back at Midland. This work was done by the U. S. Geological Survey in co-operation with the State of Louisiana, the latter being represented by Prof. G. D. Harris, in charge of the State Survey.

CALUMET QUADRANGLE.

Geographic Positions Along the Southern Pacific Railroad Between Morgan City and Lafayette.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Morgan City, Pilgrim Baptist Church.	29	41	34.53	91	12	26.18
Morgan City, in northwest corner of the Morgan City Catholic Church yard, 38 feet north of northwest corner of church, iron post stamped "Prim. Trav. Sta. No. 23, 1906, LA"	29	41	42.31	91	12	19.83
Lagonda station, road crossing	29	40	50.93	91	16	23.64
Patterson station, 1 mile east of; road crossing	29	40	46.61	91	17	34.85
Patterson station, road crossing	29	41	19.29	91	18	26.63
Calumet station, rail opposite ticket office window	29	41	52.59	91	21	57.82
Calumet station, 76 feet east of station platform, 27 feet north of Southern Pacific Railroad, iron post stamped "Prim. Trav. Sta. No. 24, 1906, LA"	29	41	52.76	91	21	56.29
Recohoc water tank, point on rail opposite	29	42	38.85	91	23	31.62
Recohoc water tank, 2.4 miles northwest of; road crossing	29	43	52.22	92	25	27.12
Bayou Sale station, point on rail opposite ticket office	29	44	28.23	91	26	20.30

GRAND LAKE QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Bayou Sale station, 1.2 miles northwest of; road crossing	29	45	05.73	91	27	15.62
Garden City station, point on rail opposite ticket office	29	45	38.20	91	28	03.56
Garden City station, 0.9 miles northwest of; road crossing	29	46	06.72	91	28	45.65
Garden City station, 2 miles northwest of; road crossing	29	46	40.00	91	29	34.80

JEANERETTE QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Franklin station, set on west side of Southern Pacific Railroad, in section house yard 80.5 feet southwest of station, 60 feet west of track, standard bench-mark post stamped "Prim. Trav. Sta. No. 25, 1906, LA".......	29	47	26.24	91	30	25.28
Franklin, crossing of railroad and New Iberia street................	29	47	51.50	91	30	50.15
Franklin station, 2 miles northwest of; railroad crossing..................	29	49	10.40	91	32	09.58
Baldwin station, point on rail opposite ticket office....................	29	50	08.62	91	33	07.75
Baldwin station, 100 feet northwest of; 25 feet west of center of highway, 15 feet south of switch, iron post stamped "Prim. Trav. Sta. No. 26, 1906, LA".....................	29	50	08.87	91	33	09.38
Baldwin station, 2.6 miles northwest of; road crossing..................	29	51	50.22	91	34	49.32
Adeline station, point on track opposite ticket office..................	29	52	32.08	91	35	31.99
Adeline station, 220 feet west of; 20 feet north of track, iron post stamped "Prim. Trav. Sta. No. 27, 1906, LA"......................	29	52	33.83	91	35	34.03
Adeline station, 1.7 miles northwest of; road crossing..................	29	53	09.69	91	36	43.56
Abavila plantation refinery, road crossing opposite.....................	29	54	15.00	91	39	11.17
Jeanerette station, crossing of railroad and St. Peter's street, line between St. Mary and Iberia parishes and city limits of Jeanerette...........	29	54	23.49	91	39	31.12
Jeanerette station, 0.8 mile east of; at city limits, 45 feet north of north track and 30 feet east of center of highway which is St. Mary-Iberia parish line, iron post stamped "Prim. Trav. Sta. No. 28, 1906, LA".......	29	54	23.78	91	39	30.64
Jeanerette station, point on rail opposite ticket office..................	29	54	51.00	91	40	11.78
Jeanerette station, 1 mile northwest of; road crossing.....................	29	55	26.35	91	41	00.21
Loisel Sugar Plantation, tram road crossing	29	56	06.16	91	41	54.75

DELCAMBRE QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Olivier station, 54 feet west of; 25 feet north of track, iron post stamped "Prim. Trav. Sta. No. 29, 1906, LA"	29	58	33.30	91	45	18.40
Olivier station, point on rail opposite ticket office......................	29	58	32.84	91	45	17.94
Olivier station, 1.8 miles northwest of; road crossing.....................	29	59	13.22	91	46	52.31
New Iberia, at south edge of; road crossing, at city limits.............	29	59	42.95	91	48	03.08

Geographic Positions Along the Southern Pacific Railroad (Louisiana Western, Iberia and Vermilion Branch) Between Delcambre and New Ibearia.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	'	"	°	'	"
Delcambre station, on west side of road crossing on Iberia-Vermilion parish line, 33 feet north of track, 25 feet west of highway, iron post stamped "Prim. Trav. Sta. No. 48, 1906, LA"	29	57	08.68	91	59	17.67
Delcambre station, road crossing on Iberia-Vermilion parish line	29	57	08.82	91	59	17.54
Bob Acres, just west of; road crossing.	29	56	57.77	91	58	00.51
Lee station, 1.8 miles west of; road crossing	29	56	39.71	91	55	48.86
Lee station, road crossing	29	56	29.20	91	54	32.21
Rynella station, road crossing	29	56	38.26	91	53	02.48
Veria station, point on rail opposite station sign	29	56	57.92	91	52	30.80
Veria station, opposite station sign, 35 feet south of track, iron post stamped "Prim. Trav. Sta. No. 49, 1906, LA"	29	56	57.81	91	52	30.54
Mile-post 4, road crossing	29	57	51.04	91	51	57.21
Veria station, 3 miles east of; road crossing	29	59	10.63	91	50	46.88

CROWLEY QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	'	"	°	'	"
Rayne station, in southeast corner of section house yard, 50 feet north of track, 8 feet inside of fence corner, just back of red tool house, iron post stamped "Prim. Trav. Sta. No. 37, 1906, LA"	30	14	11.80	92	16	10.86
Rayne station, 2 miles west of; private road crossing	30	14	11.79	92	18	11.82
Mile-post 164, road crossing	30	13	39.13	92	19	42.66
Hunter Rice Mill, road crossing east of	30	12	47.44	92	21	45.75
T. 10 S., R. 1 E., Secs. 3 and 4, north corner of	30	12	51.70	92	21	45.75
Crowley station, about 125 feet southwest of; 40 feet west of center of Parkerson avenue, 24.5 feet south of center of main track, iron post stamped "Prim. Trav. Sta. No. 38, 1906, LA"	30	12	35.45	92	22	13.88
Mile-post 168, road crossing	30	12	09.18	92	23	16.79
Crowley, 3.4 miles west of; road crossing	30	11	18.42	92	25	17.54
Estherwood, 1 mile east of; road crossing	30	10	53.52	92	26	48.55
Estherwood station, 35 feet north of track, iron post stamped "Prim. Trav. Sta. No. 39, 1906, LA"	30	10	53.12	92	27	52.07
Midland station, crossing of railroads, 485 feet east of; 35 feet south of tracks, iron post stamped "Prim. Trav. Sta. No. 40, 1906, LA"	30	10	51.00	92	29	52.96
Midland station, road crossing (Southern Pacific)	30	10	51.28	92	29	58.43

Geographic Positions Along Southern Pacific Railroad (Louisiana Western, Iberia and Vermilion Branch) Between Midland and Kaplan.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Morse station, point on rail opposite semaphore	30	07	23.61	92	29	51.27
T. 11 S., R. 1 W., corner secs. 5, 6, 7 and 8, crossroads................	30	06	39.64	92	29	51.77
Wright postoffice, road crossing......	30	00	28.79	92	25	42.40
T. 12 S., R. 1 W., corner secs. 11, 12, 13 and 14, crossroads..............	30	00	29.29	92	25	42.40
T. 12 S., R. 1 E., secs. 7 and 18, T. 12 S., R. 1 W., secs. 12 and 13, corner of, crossroads....................	30	00	29.61	92	24	42.23
Mulvey flag station, 48 feet south of; set on east side of railroad, 50 feet west of road crossing, iron post stamped "Prim. Trav. Sta. No. 45, 1906, LA".......................	30	00	25.08	92	24	11.28
Mulvey station, 1 mile east of; road crossing (37 C D)................	30	00	22.33	92	23	09.40
Mulvey station, 2.2 miles east of; irrigation canal (36 B)..............	30	00	23.40	92	22	09.65
Kaplan station, 3.5 miles west of; road crossing	30	00	25.08	92	20	36.47
Kaplan station, 1.5 miles west of; road crossing	30	00	19.13	92	18	32.46
Kaplan station, point on rail opposite station semaphore................	29	59	54.17	92	17	08.49
Kaplan station, opposite station semaphore, 45 feet south of track and 18 feet east of telegraph pole, iron post stamped "Prim. Trav. Sta. No. 46, 1906, LA"....................	29	59	53.75	92	17	08.66
Kaplan station, 1.6 miles east of; irrigation canal.....................	29	59	27.37	92	15	38.31

JENNINGS QUADRANGLE.

Geographic Positions Along Southern Pacific Railroad Between Midland and Jennings.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Midland station, 2.5 miles west of; road crossing....................	30	10	49.42	92	32	31.44
Mermentau station, 1.8 miles east of; road crossing (179 G)............	30	10	49.84	92	33	34.09
Mermentau station, 190 feet west of; 85 feet south of north rail, iron post stamped "Prim. Trav. Sta. No. 41, 1906, LA"......................	30	11	20.60	92	35	16.10
Mermentau Draw Bridge, east end of and Acadia-Calcasieu parish line..	30	11	23.04	92	35	22.70
Jennings station, on south side of Southern Pacific Railroad, on west side of first crossing west of old passenger station, 10 feet west of sidewalk and 55 feet south of main line of railroad, iron post stamped "Prim. Trav. Sta. No. 42, 1906, LA".......	30	13	17.72	92	39	31.72

Geographic Positions Along Southern Pacific Railroad (Louisiana Western, Iberia Branch) Between Bayou Queue de Tortue and Gueydan.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Bayou Queue de Tortue, east end of bridge over; Acadia-Vermilion parish line..	30	04	56.71	92	30	19.83
Bayou Queue de Tortue, 1.7 miles south of: irrigation canal..................	30	03	41.96	92	30	50.74
Gueydan, station, point on rail opposite semaphore	30	01	36.34	92	30	50.56
Gueydan station, opposite station semaphore, 35 feet west of south rail of main track; iron post stamped "Prim. Trav. Sta. No. 44, 1906, LA"......	30	01	36.34	92	30	50.96
Gueydan station, 0.9 mile south of; road crossing (45 B C)............	30	00	49.78	92	30	49.51

ABBEVILLE QUADRANGLE.

Geographic Positions Along Southern Pacific Railroad (Louisiana Western, Iberia Branch) Between Nunez Station and Erath Station.

STATIONS—	LATITUDE.			LONGITUDE.		
				°	′	″
Nunez station (postoffice), road crossing	29	59	05.92	92	13	37.55
Lastie station, point on rail opposite section house No. 405..............	29	58	55.18	92	12	18.12
Lastie station, 0.9 mile east of; road crossing (25 B C)................	29	58	48.32	92	11	27.40
Abbeville station, 58 feet west of; 29 feet north of track, iron post stamped "Prim. Trav. Sta. No. 47, 1906, LA".	29	58	19.98	92	08	25.18
Cotton gin, road crossing............	29	58	16.61	92	08	02.00
Youngs station, road crossing........	29	58	07.88	92	06	58.12
Gross Isle station, road crossing......	29	57	58.00	92	05	26.65
Aristide's switch, road crossing......	29	57	41.82	92	03	22.28
Erath station, 3770 feet east of; road crossing	29	57	25.24	92	01	21.13

NEW IBERIA QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
New Iberia station, point on rail opposite ticket office	30	00	33.49	91	49	25.41
New Iberia station, 105 feet west of water standpipe and 55 feet south of railroad watertank, iron post stamped "Prim. Trav. Sta. No. 0, 1906, LA"	30	00	31.49	91	49	25.40
Segura station, point on rail opposite station sign post	30	02	14.20	91	51	18.12
Burke, 1 mile south of; road crossing.	30	03	03.72	91	52	14.81
Burke station, on east side of railroad 28 feet from same and on south side of road at corner of road and railroad right of way fence, 100 feet southeast of station, iron post stamped "Prim. Trav. Sta. No. 31, 1906, LA"	30	03	44.82	91	52	53.84
Burke station, 880 feet northwest of; crossing of Iberia-St. Martin parish line	30	03	52.39	91	53	00.59
Cades station, point on rail opposite ticket office	30	05	04.87	91	54	06.21
Duchamp crossing station, on southwest corner of road, 35 feet south of track, iron post stamped "Prim. Trav. Sta. No. 32, 1906, LA"	30	06	10.41	91	55	05.23
T. 11 S., R. 5 E. (southwestern district La.), corner secs. 41, 12 and 42	30	06	05.60	91	55	21.27
Duchamp station, 1.6 miles northwest of; Lafayette-St. Martin's parish line, road crossing	30	07	14.27	91	56	03.49
Billeaud switch, road crossing	30	08	06.28	91	56	50.66
Broussard station, in northeast corner of section house yard, iron post stamped "Prim. Trav. Sta. No. 33, 1906, LA"	30	09	03.24	91	57	42.73
Landrys switch, point on rail opposite station sign	30	10	36.09	91	59	03.55

LAFAYETTE QUADRANGLE.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Landrys switch, 2.3 miles northwest of; road crossing	30	12	21.66	92	00	07.71
Lafayette station, in northwest corner of freight house yard about 240 feet north of passenger station and about 30 feet south of track, iron post stamped "Prim. Trav. Sta. No. 34, 1906, LA"	30	13	43.14	92	00	50.98

Geographic Positions Along the Southern Pacific Railroad Between Lafayette and Rayne Station.

STATIONS—	LATITUDE.			LONGITUDE.		
	°	′	″	°	′	″
Lafayette station, 1 mile west of; road crossing	30	14	08.29	92	01	28.85
Scott station, 2.9 miles east of; road crossing	30	14	08.62	92	02	57.94
Scott station, 1 mile east of; road crossing	30	14	09.03	92	04	48.13
Scott station, in southeast corner of section house yard opposite station, 30 feet north of track, 2 feet inside fence corner, iron post stamped "35, 1906, LA"........................	30	14	09.50	92	05	41.98
Duson station, 2 miles east of; road crossing (154 C)........................	30	14	09.87	92	09	00.44
Duson station 25 feet west of the northwest corner of station, 50 feet north of track, in southwest corner of field, iron post stamped "Prim. 36, 1906, LA"........................	30	14	10.66	92	10	57.85
Duson station, 1.6 miles west of; Lafayette-Acadia parish line, road crossing	30	14	10.51	92	12	35.37
Rayne station, 1.2 miles east of; road crossing	30	14	10.94	92	14	53.19

THE JENNINGS SHEET.

By consulting the map (Pl. XI) it will be observed that the area here spoken of as the "Jennings Sheet" does not correspond to the "Jennings Quadrangle" of the notes furnished by the Computing Division of the U. S. Geol. Sur. (See pp. 15 & 20). The reason for this is that the area shown is more or less of a unit, topographically and commercially. Here, located centrally on our sheet, is the junction of the three large bayous forming the Mermentau River. Here just above the center is the famous Jennings Oil Field, with the important and flourishing town of Jennings and the Oil Refinery to the west, and the village of Egan with its loading racks to the east. Now, on the regular 15′ quadrangles Jennings and the Jennings Oil Field come on different plates, for 30° 15′ passes between the two. We fully realize, however, that there is a great deal to be gained by uniformity in publication and that the U. S. topographic sheets must be 15′ or 30′ quadrangles. Yet, till this area is taken up by that organization we feel sure that the form of our map is quite preferable. There can be no great loss, however, for the data here presented may be quickly transferred onto the regular 15′ quadrangular forms.

Again, it will be observed that whereas the usual contour intervenes on the U. S. topographic sheets is 20 or 50 feet, it is here but 5 feet. The reason for this is that the country is so flat that a twenty-foot contour map would be almost worthless. The area represented ranges in height from about 3 to 33 feet above sea level, therefore there would be but one contour line (the 20 foot), if the interval were 20 feet as usual (and as shown on the Winnfield Sheet). To be of most service in rice culture and levee and canal construction the contour interval should be but about two feet; but time and funds have not permitted map work of such detail; but it is hoped the results of our work embodied in the accompanying sheet with its 5-foot contours will be found of considerable real service to the people dwelling in this region.

There is one more point that needs special mention. That is the differentiation on the map of the wooded from the prairie areas. This has been done not only to show to what extent the region is wooded, but to show the distribution of soils upon which trees will grow and the distribution of soils that ae not adapted to forest growth—in other words, the prairie soils.

Details regarding the soils in general of the eastern part of this area can be obtained by writing the Bureau of Soils, Agri cultural Department, Washington, D. C., for the report on the soils of Acadia Parish, La. A map therein shows the distribution of soils in that parish. For details regarding the deep well water supply for domestic and irrigation purposes (See Bull. 1, Geol. Surv. La.). Since that bulletin was written there has been a gradual increase in dependence upon irrigation waters furnished by large companies and obtained almost wholly from the bayous traversing the region.

The geology of the Jennings Oil Field will be found in a forthcoming Bulletin.

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